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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,570	05/16/2001	David Chaimers Schie	023P2328	4094

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EXAMINER

VY, HUNG T

ART UNIT	PAPER NUMBER
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2828

DATE MAILED: 04/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/859,570

Applicant(s)

SCHIE, DAVID CHAIMERS

Examiner

Hung T Vy

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.


- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on the amendment filed on 12/27/2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-50 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


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Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

1. In response to the amendment filed on 12/27/2002, claims 1-50 are pending in this application.

Drawings

2. The drawings 1-6 are objected to by the PTO Draftsperson for the reasons noted on the attached Notice of Draftsperson's Patent Drawings Review, form PTO-948.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12-22 and 41 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 12, the phrase "an adjustable response whereby a transition time of said AC signal may be adjusted" renders the claim indefinite how control circuit adjusts a transition time of AC signal. No limitation recite in claim for adjusted a transition time of AC signal.

Regarding claims 13 and 15, the claim recites a programmable capacitor array. It is not clear where is a programmable capacitor array. Fig. 5 shows only capacitor array controlled by those switch. It is not consistent.

Art Unit: 2828

Regarding claim 41, the claim recites a programmable resistor array. It is not clear where is a programmable resistor array. Fig. 4 shows only resistor array. It is not consistent.

Claims 14 and 16-22 depend from rejected claim 12, 13, and 15 thereby render these dependent claims indefinite.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9-12, 23-40, and 42-50 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Urakami et al., U.S. patent No. 5,491,329.

Regarding claims 1-6, 9, 12, 23-40, and 42-50, Urakami et al. disclose a circuit for controlling a laser diode (140), comprising: a bias circuit (110,130) coupled to said laser diode (140) for setting a DC operating point of said laser diode; an amplifier having an output coupled to said laser diode (140) for superimposing an AC signal on said DC operating point, wherein said amplifier has a control input for controlling a maximum output swing of said amplifier (See column 7, line 46-67); a control circuit (120,130) coupled to said control input for setting said maximum output swing; circuit have an

Art Unit: 2828

adjustable response whereby a transition time of said AC signal may be adjusted (See column 3, line 50-58), it is inherent that Urakami et al. disclose a programmable memory coupled to said control circuit for storing values for controlling said maximum output swing because Urakami et al. disclose a processing device that comprises a reference signal (See column 3, line 66-67 and column 4, line 1-5). The integrated circuit, further comprising: a control circuit (120 and 130) coupled to a third one electrical connections for coupling an output of an external modulation amplifier for supplying an AC modulating signal to said laser diode (140) through a fourth one of said electrical connections, said control circuit having an adjustable response whereby a transition time of said AC signal may be adjusted (See column 7, line 46-60 and fig. 3).

With respect to claims 10, 11, and 24 -27, the methods of operating a laser are considered as product by process steps.

Claim Rejections - 35 U.S.C. § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-22 and 41 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Urakami et al., U.S. patent No. 5,491,329 in view of Kowalski et al., U.S. patent

Art Unit: 2828

No. 6,034,446, and further in view of Swanson, U.S. patent No. 6,310,518.

Regarding claim 13-22 and 41, Urakami et al. disclose all limitations of circuit for controlling a laser diode except a programmable capacitor array, plurality of switches, register. However, Kowalski et al. and Swanson disclose the capacitor array (See Fig.5 column 4, line 13-17 in Kowalski et al) and register (See column 2, line 48)

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify urakami et al. to have programmable capacitor array, register as taught by Kowalski et al. and Swanson because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of the invention.

Allowable Subject Matter

6. Claims 7-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, since the prior art of record and considered pertinent to the applicant's disclosure does not teach or suggest the claimed limitations. Urakami et al., taken individually or in combination, do not teach the claimed invention having **a digitally programmable current source** comprises: a plurality of current sources, a plurality of switches, a shift register and having **programmable capacitor array** comprises: a plurality of capacitors, a plurality of switches and shift register.

Citation of Pertinent References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Bielas discloses Light source control device, U.S. Patent No. 6,359,918.

The patent to Taguchi et al. disclose Semiconductor Laser Apparatus, Information recording/Reproduction Apparatus and Image Recording Apparatus, US. Patent No. 6,345,062.

Conclusion

8. When responding to the office action, Applicants are advised to provide the examiner with the line numbers and page numbers in the application and/or references cited to assist the examiner to locate the appropriate paragraphs.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung VY whose telephone number is (703) 605-0759. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the

Art Unit: 2828

organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

10. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Hung T. Vy
Art Unit 2828

March 6, 2003



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